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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,829	11/28/2001	Yukinori Matsumoto	990191B	1134

38834 7590 09/17/2004

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WASHINGTON, DC 20036

EXAMINER

SAJOUS, WESNER

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 09/17/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,829

Applicant(s)

MATSUMOTO ET AL.

Examiner

Wesner Sajous

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43, 47, 48, 50, 54, 55, 57, 61, 62, 64-81 and 95-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47, 48, 54, 55, 61-81 and 95-97 is/are allowed.
- 6) ☒ Claim(s) 43, 50 and 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14, 16.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Remark

This communication is responsive to the amendment and response dated June 29, 2004. Claims 43-81 and 95-97 are pending in the present application. By this amendment, claims 43, 47, 48, 50, 54-55, 57, 61-62, 64-81, and 95-97 are presented for examination.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 43, 47, 48, 50, 54-55, 57, 61-62, 64-81, and 95-97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43 recites the limitation "object image each for said region" in lines 6 & 9. There is insufficient antecedent basis for this limitation in the claim. The claim calls for a plurality of regions and fails to define a single region, although the one region can be included in the plurality of regions.

Claims 47, 48, 50, 54-55, 57, 61-62, 64-81, and 95-97 contain the problem of claim 43; they are, therefore, similarly rejected.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 43, 50, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (US Pat. # 6151424) in view of Avinash (US Pat. # 5832134) and further in view of Nakamura (6215914).

Considering claim 43, Hsu and Avinash render obvious most claimed features of the invention as set forth in the previous office action, paper # 7; however, Hsu and Avinash fail to teach an extraction means as a process of averaging information of each pixel in an object image each for a region.

Nakamura, in a similar art, teaches a process of averaging information of each pixel in an object image each for a region (e.g., calculating an average value of brightness of all pixels of object pictures 21 or 22 (see col. 33 line 67 to col. 34 line 2), wherein picture 21 or 22 are defined to include a plurality of reference areas or regions (see col. 31, lines 16-41)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Hsu and Avinash to include the calculated averaging information as defined in Nakamura, in order to allow feature point to be extracted and a line picture signal to be generated even when the changes of

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brightness is small within the object picture and is difficult to detect an edge of an image. See Nakamura's col. 34, lines 25-28.

Claim 50 contains features that are analogous to the limitations recited in claim 43. Claim 50 is therefore rejected for the same reason.

Claim 57 is a computer program product performing the same method as apparatus claim 43 it is, therefore, rejected for the same reasons and rationale set forth for claim 43.

Allowable Subject Matter

5. Claims 47, 48, 54-55, 61-81, and 95-97 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Reason for Indicating Allowable Subject Matter:

Claims 47, 48, 54-55, 61-62, 67-81, and 95-97 are allowed for reasons indicated in the previous office actions. Claims 64-66 are allowed because the prior art fails to teach "extracting as object portion a region having a mean value smaller than a predetermined threshold out of a plurality of regions. As a result, the limitations of claims 47, 48, 54-55, 61-81, and 95-97 are allowed over the prior art.

Conclusion

Any response to this action should be mailed to:

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or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE")

Or:

(703) 308-5359 for informal or draft communications, please label "PROPOSED"
or DRAFT")

Hand-held delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA , 6th floor (receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Wesner Sajous whose telephone number is (703) 308-
5857. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
Supervisor, Matthew Bella, can be reached at (703) 3086829. The fax phone number
for this group is (703) 308-6606.

Wesner Sajous - WOS

9/13/04

Matthew C. Bella

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SUPERVISORY PATENT EXAMINER
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